Mutual Aid Agreements: Essential Legal Tools for Public Health Preparedness and Response

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Mutual aid is the sharing of supplies, equipment, personnel, and information across political boundaries. States must have agreements in place to ensure mutual aid to facilitate effective responses to public health emergencies and to detect and control potential infectious disease outbreaks. The 2005 hurricanes triggered activation of the Emergency Management Assistance Compact (EMAC), a mutual aid agreement among the 50 states, the District of Columbia, Puerto Rico, and the US Virgin Islands. Although EMAC facilitated the movement of an unprecedented amount of mutual aid to disaster areas, inadequacies in the response demonstrated a need for improvement. Mutual aid may also be beneficial in circumstances where EMAC is not activated. We discuss the importance of mutual aid, examine obstacles, and identify legal "gaps" that must be filled to strengthen preparedness. (*Am J Public Health.* 2007;97:S62–S68. doi:10.2105/AJPH.2006.101626)

"When Andrew hit, there was no standardized way for states to share resources."

"It ended up being a midnight phone call between governors," said Amy Hughes, a policy analyst for the National Emergency Management Association, which represents state emergency response agencies. "A lot of legal things had to be done in the middle of the night."

—Bousquet et al.[1]

MUTUAL AID IS THE SHARING of supplies, equipment, personnel, information, or other resources across political boundaries. It is effectively accomplished by entry into mutual aid agreements. After Hurricane Andrew in 1992, Congress approved the Emergency Management Assistance Compact (EMAC), and it has been enacted in all states, the District of Columbia, Puerto Rico, and the US Virgin Islands (Table 1).[2] EMAC is a mutual aid agreement among the states and is a major legal tool for sharing resources across state boundaries, including, for example, those resources shared in Hurricane Katrina response and recovery efforts. Hurricane Katrina triggered a flow of personnel, equipment, and supplies into the affected areas from other jurisdictions; epidemiologists and other public health experts assisted in identifying and controlling public health threats in the storm's aftermath. Other states continued to provide shelter, food, clothing, and education for those who had to flee the area.

In addition to the types of mutual aid implicated by Hurricane Katrina (personnel, equpment, and supplies), sharing epidemiological or laboratory information and specialized personnel across interstate and international borders may be essential to detecting and controlling future infectious disease outbreaks, whether occurring naturally (e.g., such as the severe acute respiratory syndrome [SARS] outbreak of 2003 or the threat of H5N1 influenza) or as a result of a bioterrorist attack. States, therefore, must have agreements in place to ensure mutual aid in all its forms to facilitate effective responses to disasters, such as hurricanes Katrina and Rita, and to detect and control potential infectious disease outbreaks before they become disasters.

These public health emergencies have heightened the recognition of potential and actual obstacles to effective mutual aid and have exposed legal "gaps," both within and outside EMAC, that must be filled. Although EMAC facilitated the movement of an unprecedented amount of mutual aid to Katrina-affected disaster areas, inadequacies in the response demonstrated a need for improvement.[3] EMAC, for example, offers liability protection only to officers or employees of responding states; because of this, many states were unable or uncertain about how to avail themselves of the services of volunteers (who were not protected from legal liability) who offered their services.[4] Some states, however, are working to resolve this issue.[5] Furthermore, because EMAC provisions are triggered only on a gubernatorial declaration of emergency, the sharing of resources during smaller scale, undeclared emergencies must be effectuated by agreements separate from EMAC. The same holds true with regard to the sharing of epidemiological or laboratory data designed to detect threatened infectious disease outbreaks. It may even hold true, in some circumstances, that routine public health functions would be more effectively performed by executing mutual aid agreements to share relevant information, supplies, or equipment.

In response to the increased recognition of the importance of mutual aid agreements, the Public Health Law Program of the Centers for Disease Control and Prevention initiated efforts to characterize the legal framework for mutual aid. Specifically, the program gathered information concerning mutual aid and related laws for the categories of interstate and international mutual aid, systematically compiled and synthesized the information, performed basic supplementary legal research, and assessed and identified legal approaches to accomplish effective mutual aid. This effort involved meetings with,

TABLE 1—Legal Authorities Enabling Public Health Emergency–Related Mutual Aid Between US States, by Law

Name of Law or Other Authority	Effect	Citation	Comments
Joint Resolution Granting the Consent of Congress to the Emergency Management Assistance Compact	Ratifies Emergency Management Assistance Compact	Public Law 104-321, 110 Stat. 3877	Approved October 19, 1996
Interim National Preparedness Goal, Homeland Security Presidential Directive 8 (HSPD 8)	Expanding regional collaboration is an overarching priority of the goal	NA	President Bush issued HSPD 8 on December 17, 2003. Department of Homeland Security announced the goal on March 31, 2005.
Public Health Security and Bioterrorism Preparedness and Response Act of 2002, Section 107	Authorizes DHHS to fund and assist state development of systems for advance registration of volunteer health professionals	Public Law 107-188, 42 U.S.C.A. § 247d-7b	Assessment of legal and regulatory issues is scheduled to be completed for all states by the end of calendar year 2006.

Note. DHHS = US Department of Health and Human Services.

observation of, and participation in the activities of multiple groups nationally engaged in projects to improve state mutual assistance to other states or to counterparts in Mexico and Canada.

We describe the basic legal framework for states to accomplish interstate and international mutual aid, identify gaps in that framework, and suggest steps that could be taken to address those gaps. We focus on the following: (1) types of mutual aid; (2) current federal approaches to promote increased use of mutual aid agreements by states; (3) mutual aid projects undertaken by states, including efforts to assess legal authority; and (4) federal constitutional and other legal issues relating to mutual assistance (Tables 1–3 summarize laws and other authorities relating to international and interstate mutual aid). Our findings underscore that, whereas existing legal authority may permit some types of mutual aid (e.g., information sharing), several additional actions, including state statutory changes, congressional approval, definitive legal interpretations, and gubernatorial declarations of emergency, will be required before other forms of mutual aid can be implemented.

Even when legally authorized and executed, mutual aid agreements will generally not be fully effective unless necessary follow-up efforts are undertaken to ensure that agreements will serve their intended purpose. States must work together and coordinate with other relevant jurisdictions through the use of tabletop exercises and other planning and implementation measures to ensure that mutual aid agreements fulfill their promise as tools for effective public health preparedness and response.

TYPES OF MUTUAL AID

Mutual aid is composed of at least 5 categories over a gradient of potential liability, including the sharing of planning information, epidemiological and laboratory data or information, equipment and supplies, unlicensed personnel, and licensed personnel.

The sharing of planning information is likely to be encompassed within existing grants of statutory authority, even in the absence of an EMAC declaration of emergency, and entails little or no legal risk. EMAC, for example, which has been enacted as a statute in each of the states, the District of Columbia, Puerto Rico, and the US Virgin Islands, requires each state to formulate interstate cooperative plans and programs to, among other things, provide crossborder warning to other communities, ensure delivery of services and resources, and inventory resources for interstate sharing.[6]

By contrast, the sharing of licensed health care professionals, particularly in the absence of a declared emergency, raises complex licensing, privileging, and credentialing issues and poses significant liability and compensation risks. The sharing of other things, such as private health information also require the analysis of existing legal authority and risk assessment. For example, protected health information contained in epidemiological reports is subject to confidentiality laws and may require an analysis of the legal right to share the information. The sharing of equipment, supplies, and unlicensed personnel could be undertaken only with statutory authorization and would likely expose states to legal risks beyond those involved with the sharing of information.

Regardless of the type of mutual aid activity, mutual aid agreements are essential to establishing the rules, processes, and procedures to be followed in sharing information, resources, or personnel. With particular regard to the sharing of resources or personnel, binding agreements

TABLE 2—Legal Authorities Enabling Public Health Emergency–Related Mutual Aid Between US States and Other Sovereign States, by Law

Name of Law or Other Authority	Effect	Citation	Comments
Robert T. Stafford Disaster Relief and Emergency Assistance Act	Directs Federal Emergency Management Agency director to assist states in arranging mutual aid with neighboring countries.	Public Law 93-288, 88 Stat. 143, 42 U.S.C.A. §§ 5121-5206	Relevant provision is 42 U.S.C.A. § 5196a
United States–Mexico Border Health Commission Act	Establishes US–Mexico Border Health Commission	Public Law 103-400	Approved October 22, 1994
Joint Resolution Granting the Consent of Congress to the Pacific Northwest Emergency Management Arrangement	Approves Pacific Northwest Emergency Management	Public Law 105-381, 112 Stat. 3402	Approved November 12, 1998
Agreement Between the Government of Canada and the Government of the United States of America on Cooperation in Comprehensive Civil Emergency Planning and Management	Directs consultative group to appropriately encourage and facilitate planning and development of mutual cooperation by provinces, states, and municipalities	Treaty Series 1998/36; agreement approved April 28, 1986; renewed December 2, 1998	Relevant provision is agreement's Annex A, Section 2.c.
Revised International Health Regulations	Provides the key global instrument for protection against the international spread of disease.	World Health Organization 58th World Health Assembly Provisional Agenda Item 13.1	Adopted by the World Health Assembly on May 16, 2005
Security and Prosperity Partnership of North America	Activates a trilateral effort to increase security and enhance prosperity among the United States, Mexico, and Canada, through greater cooperation and information sharing.	Can be accessed at http://www.spp.gov.	Introduced by President Bush, President Fox, and Prime Minister Martin on March 23, 2005.
Pacific Northwest Emergency Management Arrangement (PNEMA)	Authorizes cooperation among Washington, Idaho, Oregon, Alaska, British Columbia, and the Yukon Territory.	NA	Approved by Public Law 105-381. This is a very generally worded document. Efforts are underway to develop an EMAC-type annex.
International Emergency Management Assistance Memorandum of Understanding (IEMAC)	Provides for mutual assistance among Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, Quebec, New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland in managing emergencies arising from natural disaster, technological hazard, or manmade disaster.	NA	Signed July 18, 2000. Modeled on the Emergency Management Assistance Compact. Has been used in snow emergencies. Has not been approved by Congress.
Great Lakes Forest Fire Protection Agreement	Establishes a board to coordinate exchange of forest fire mutual aid among Minnesota, Wisconsin, Michigan, and Ontario and sets rules governing liability and compensation.	NA	Executed by natural resources officials in July–August 1989. The board established by the agreement also has entered into an agreement with the Forest Service, US Department of Agriculture.
The Northwest Wildland Fire Protection Agreement	Authorizes mutual aid for prevention, presuppression, and control of wildland fires. Members include 5 states, 2 provinces, and 1 territory, and the inclusion of other contiguous states, territories, and provinces is permissible. The agreement addresses command and control, privileges and immunities, liability, reimbursement, and workers' compensation.	Public Law 105-377, 112 Stat. 3391	Approved by Congress on November 12, 1998

TABLE 3—Legal Authorities Enabling Public Health Emergency–Related Mutual Aid Both Between US States and Between US States and Other Sovereign States, by Law

Name of Law or Other Authority	Effect	Citation	Comments
Public Health Service Act	Authorizes CDC funding	42 USC §§ 241, 247	Funding through cooperative agreements is intended to improve mutual aid across interstate and international borders
The US constitution's "Compact Clause"	Regulates binding agreements between states or between states and foreign countries without congressional approval	Article I, Section 10, US Constitution	Binding agreements may be valid without Congressional approval when they do not intrude upon the power of the federal government or alter the political balance between the states and the federal government. State Department guidance is available to the states.

Note. CDC = Centers for Disease Control and Prevention.

must necessarily address issues of liability, reimbursements, and workers' compensation.

FEDERAL MUTUAL AID STRUCTURE

International Mutual Aid

State cooperation and assistance across international borders is contemplated by US–Canada treaty language,[7] the Stafford Act,[8] US Department of Health and Human Services (DHHS) funding for the development of international infectious disease surveillance systems,[9] structural inclusion of states in activities of the US–Mexico Border Health Commission[10] and the Security and Prosperity Partnership of North America (SPP),[11] and the adoption of the International Health Regulations (Tables 2–3).[12]

The US–Canada treaty calls for encouragement and facilitation of appropriate emergency management cooperation by provinces and states. The Stafford Act obligates the Federal Emergency Management Agency director to "give all practicable assistance to States in arranging, through the Department of State, mutual emergency preparedness aid between the States and neighboring countries."[8] One of the functions of the US–Mexico Border Health Commission is to establish a system for gathering health-related data and monitoring health problems in the US–Mexico border area. The SPP, created on March 23, 2005, by the leaders of the United States, Mexico, and Canada, envisions a "healthier North America." Consistent with that goal, SPP efforts include improved information sharing mechanisms, the development of crossborder mutual assistance protocols, the implementation of the Guidelines for US–Mexico Coordination on Epidemiological Events of Mutual Interest developed by the Health Working Group of the US–Mexico Binational Commission, and the establishment of an early warning infectious disease surveillance (EWIDS) system. For the latter element, DHHS provides funding to 20 border states and Mexico for the development of EWIDS systems in conjunction with crossborder provinces and states in Canada and Mexico, respectively.

The revised International Health Regulations (IHRs), although not in force until 2007, address cooperative crossborder efforts in Article 57, which stipulates that the IHRs are not intended to interfere with "special treaties or arrangements" that will facilitate the IHRs by promoting crossborder health measures or the efficient exchange of public health information.

Interstate Mutual Aid

EMAC stipulates the rules to be followed when sharing personnel and other resources across state boundaries during an emergency declared by the governor of a state requesting assistance. Three major issues are addressed by EMAC: liability, reimbursement, and response. The state requesting assistance under EMAC is responsible in tort for the actions of workers from the assisting state. The state providing assistance is guaranteed payment, either from federal funds secured by the state requesting assistance or from funds of the requesting state, although the state providing assistance may waive reimbursement. Finally, EMAC facilitates a quick response to an emergency using the unique resources (personnel, equipment, and materials) possessed by governments.

Interstate cooperation is envisioned and facilitated by the Interim National Preparedness Goal established under Homeland Security Presidential Directive 8, which sets expanded regional cooperation through mutual aid agreements as a national priority (Table 1). The Centers for Disease Control and Prevention cooperative agreements, intended to upgrade and improve state and local public health preparedness, encourage the development of mutual aid agreements as a preparedness tool. Finally, Congress provided funding and directed the DHHS Secretary to create a program to develop an Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) project (Table 1).[13] Although the DHHS Health Resources and Services Administration provides funding

for ESAR-VHP development, states are responsible for designing, developing, and administering what is envisioned as a national system of state-based emergency volunteer registries. Cooperation across state lines is an obvious component of the system. The Pandemic and All-Hazards Preparedness Act, Public Law 109-417, is a recent and important addition to the federal mutual aid structure. A consortium of states may be considered an entity eligible for funding under the Act, and section 201 requires "a description of the mechanism the entity will implement to utilize the Emergency Management Assistance Compact or some other mutual aid agreements for medical and public health mutual aid." These and other provisions in the Act concerning the use of mutual aid agreements to accomplish federal, state, local, and tribal coordination and integration of resources among these entities are strong evidence of Congressional encouragement of mutual aid agreements.

ASSESSMENT OF STATE LAW ISSUES

Analyses of state legal authority to share information, equipment, supplies, and personnel and to enter into mutual aid agreements with other states or across international borders are underway around the country. Attorneys in the 10 states comprising the Mid-America Alliance (MAA)—Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming—have performed a preliminary assessment of legal authority. The MAA's mission is "to provide a framework for mutual assistance among states during a situation that stresses one individual state's resources but does not initiate a governor declared state of emergency." MAA seeks to "establish a system by which neighboring states can share services, resources, and information to efficiently address the needs of citizens during a public health emergency."[14] The results of the assessment are being compiled and coordinated for the purpose of determining activities that may be immediately undertaken by MAA under existing statutes and to identify those activities that must await the passage of legislation providing the requisite authority.

Texas has assessed its legal ability to enter into cooperative arrangements with Mexican states for the purpose of sharing epidemiological information, concluding that it lacks statutory authority to share confidential health information across the border. It has also determined that, whereas state authority exists to enter into mutual aid agreements across the border, one provision of the US Constitution (discussed earlier) presents a federal law obstacle to entry into binding agreements.[15] Lawyers in some Great Lakes states of Michigan, Minnesota, New York, and Wisconsin, in conjunction with the EWIDS Project, have reviewed and analyzed the privacy and confidentiality laws of each of those states in an effort to develop an agreement to share health information with each other and with the province of Ontario in Canada.[16]

Finally, the ESAR-VHP project is serving as a focal point for review and analysis of state law issues relating to the sharing of volunteer licensed health care professionals. Those issues include licensing, credentialing, and privileging of volunteers.[17] Personnel providing medical care (and the private or public sector facilities with which they are associated) will also be concerned about potential civil and criminal liability, as well as potential compensation for harm to workers or volunteers through workers' compensation. The ESAR-VHP project's Legal and Regulatory Issues Draft report (May 2006) provides a legal framework has been developed for states' use when examining their laws regarding these issues.[17]

CONSTITUTIONAL IMPACT ON STATE MUTUAL AID

The US Constitution provides that "No state shall, without the consent of the Congress, . . . enter into any agreement or compact with another state, or with a foreign power . . . ." (Table 3).[18] This provision obviously affects the legal ability of states to enter into mutual aid agreements with each other or with Mexican states or Canadian provinces.

An obvious method of compliance is the creation of cooperative arrangements that would not constitute "agreements or compacts" within the meaning of the constitutional prohibition. Provided that they possess authority under their own laws, states are free to enter into "nonbinding" agreements across their borders. The Guidelines for US–Mexico Coordination on Epidemiological Events of Mutual Interest are nonbinding and serve as an example of this sort of approach.[19] Nonbinding agreements have the potential to be of value to states, particularly if they're interested in sharing information.

In the absence of the protections provided by EMAC during a declared emergency, however, concerns over legal liability, compensation, and reimbursement would certainly compel the execution of binding agreements before equipment, supplies, and personnel would be shared. Of course, states can individually or collectively approach Congress to seek approval to enter into binding agreements beyond those currently authorized by EMAC. Alaska, Idaho, Oregon, and Washington have obtained Congressional approval of their Pacific Northwest Emergency Management Arrangement (PNEMA) with British Columbia and the Yukon Territory (Table 2).[20] Those states are currently in the process of executing a more specific annex to the arrangement, modeled in part on EMAC.[21] Six New England states entered into an EMAC-type emergency management agreement in July 2000 with 5 eastern Canadian provinces, known as the International Emergency Management Assistance Memorandum of Understanding (IEMAC). Congressional approval of IEMAC is being sought by the involved

states.[22] Despite the lack of approval, IEMAC has, in fact, been effectively used to share equipment during small-scale events, such as snow emergencies.

The Stafford Act provides an abbreviated means of obtaining Congressional approval of interstate agreements. Congressional consent is considered granted 60 days after transmission of an interstate agreement to both houses. Disapproval or withdrawal of consent by Congress is authorized at any time.[23]

Although the Office of Treaty Affairs in the Department of State recommends Congressional approval of binding agreements as the safest legal course, the office has been consulted on general guidance suggesting some potential for state attorneys to craft binding agreements that are less likely to raise constitutional concerns. Although it would have to be initially determined that the contemplated agreement would not conflict with any federal initiative, in view of federal encouragement of state mutual aid agreements, this would not appear to be an issue. Beyond that, particularly with regard to an international agreement, it may be advisable for such an agreement to contain language confirming that the state is bound by its own laws and federal law, that there is no intention to create binding international law, that a state may withdraw from the agreement at any time, and that the agreement may not be construed as encroaching on federal authority.[24]

As MAA and other states resolve state law questions associated with sharing supplies, equipment, and personnel in nondeclared emergency situations, they also can serve as mechanisms for determining the best course of obtaining compliance with federal constitutional requirements. Particularly within the interstate context, state attorneys may wish to explore case law interpreting the compact clause with regard to agreements between states to determine whether states are afforded more latitude concerning those types of agreements than would exist with regard to agreements with foreign governments. Case law suggests that binding agreements may be valid without Congressional approval when they do not intrude on the power of the federal government or alter the political balance between the states and the federal government.[25]

It may be advisable to identify and review other state and local crossborder agreements currently in existence, some of which involve formal written documents. Fire protection agreements may be particularly informative. Examples include the Great Lakes Forest Fire Protection Agreement, signed in 1989 by natural resources officials from Michigan, Minnesota, Ontario, and Wisconsin, and the Northwest Wildland Fire Protection Agreement, approved by Congress on November 12, 1998 (Table 2). The agreement contains provisions appearing to bind the states on matters relating to liability, compensation, and reimbursement. Many other cooperative relationships across the borders are based on informal, "handshake" agreements. Particularly along the US–Mexico border, some of these agreements concern public health issues. However, it is unknown whether legal analysis was undertaken before the formation of these agreements.

THE LAWS OF CANADA AND MEXICO

The relationship between national and provincial governments in Canada is somewhat similar to the US federal–state relationship and does not itself seem to pose an impediment to the creation of mutual aid agreements.[26] Although different bodies of law will certainly occasion some areas of disagreement and need for further discussion and negotiation, national and provincial lawyers in Canada have been readily available for dialogue on issues as they arise.

Mexico's legal system appears to be relatively centralized; states appear to have less authority than that possessed by either US states or Canadian provinces. Although health officials in Mexico have expressed the view that the centralized system will not be an impediment to cooperation between states in Mexico and the United States, they acknowledge that these issues are in need of review by attorneys from Mexico. Further study of Mexican law and the development of relationships with attorneys in Mexico is advisable.

CONCLUSIONS

In the aftermath of recent public health emergencies, multiple efforts have been undertaken in the United States and in conjunction with officials in Canada and Mexico to identify and clarify legal issues relating to the use of mutual aid agreements and to enhance legal preparedness for public health emergencies. These developments underscore that the accomplishment of effective mutual aid agreements rests on the completion of state law analyses, improved understanding of the steps necessary to comply with constitutional requirements, increased familiarity with public health and other relevant laws in Canada and Mexico, continued coordination among state crossborder groups, and cooperation between those groups and federal crossborder projects. States are generally aware of the revised IHRs, and SPP is taking steps to coordinate its efforts with those of the regional crossborder projects. Continued coordination and development of formal mechanisms for state inclusion will be components of the federal crossborder development process, and the resolution of legal issues discussed herein will be an objective of the process.

As states conclude that their existing laws authorize entry into mutual aid agreements or as they pursue new legislation to obtain such authority, there should be a concerted effort to share and use lessons learned among the states to the greatest practicable extent. Similarly, strategies for compliance with federal constitutional requirements should be shared. Nonbinding arrangements may provide a viable means for sharing health information. Liability, compensation, and reimbursement issues associated with the sharing of supplies, equipment,

or personnel (in nondeclared emergencies falling outside of the EMAC), however, can only be effectively addressed in mutual aid agreements creating binding obligations on the parties. States may be comfortable entering into binding agreements drafted with an eye to existing judicial interpretations of the compact clause or helpful suggestions made by the Department of State. Or, following the lead of EMAC and PNEMA, states may decide to seek Congressional approval of binding agreements. Congressional approval of PNEMA (particularly if IEMAC subsequently receives approval), coupled with the strong federal encouragement of state mutual aid across borders, suggests that Congressional approval of an international EMAC-type agreement covering all of the states along the US–Canada and US–Mexico borders may be feasible.

Because the objectives of the MAA include the sharing of supplies, equipment, and personnel in nondeclared emergency scenarios, MAA must address the constitutional "binding" issue in its contemplated interstate agreements. Whether congressional approval could be obtained via an amendment to EMAC or some other mechanism is an open question. In any event, MAA public health officials have initiated discussions with governor's offices and emergency management officials in the MAA states regarding the advisability of pursuing "nondeclared emergency" authority. Future directions will certainly be affected by the outcome of those discussions.

Finally, with regard to agreements with Canadian provinces and Mexican states, the cultivation of working relationships will permit US attorneys to rely to an extent on attorneys from Canada and Mexico for explanations of their laws. Nonetheless, US attorneys would be well advised to develop expertise about those laws to ensure that mutual aid agreements are negotiated on a solid legal foundation and that they meet the objectives shared by US and Mexican states and Canadian provinces. ■

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Contributions

D.D. Stier gathered, compiled, and synthesized information concerning mutual aid, performed basic supplementary legal research, and assessed and identified legal approaches to accomplish effective mutual aid and wrote the article. R.A. Goodman played an essential role in conceptualizing the framework for the article and in refining the content through successive drafts and revisions of analysis and text.

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Human participants were not involved in the research reported in the article.

References

1. Bousquet S, Adair B, Squires C. Unlike Andrew, aid's right on Charley's heels. *St. Petersburg Times.* August 17, 2004. Available at: http://www.sptimes.com/2004/08/17/news_pf/Weather/Unlike_Andrew__aid_s_.shtml. Accessed June 21, 2006.

2. Public Law 104–321.

3. US Government Printing Office. A Failure of Initiative, Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina. Available at: http://www.gpoaccess.gov/congress/index.html. Accessed June 21, 2006.

4. The Center for Law and the Public's Health at Georgetown and Johns Hopkins Universities. Hurricanes Katrina and Rita-legal issues concerning volunteer health personnel. Available at: http://www.publichealthlaw.net/Research/Katrina.htm. Accessed June 21, 2006.

5. Iowa Code Annotated § 135.143 (5) 2 and Indiana Code 10–14-3–19 provide that volunteers are considered state employees under EMAC.

6. Article III, §A

7. An Agreement Between the Government of Canada and the Government of the United States of America on Cooperation in Comprehensive Civil Emergency Planning and Management.

8. 42 U.S.C. § 5196a

9. Public Health Service Act, 42 U.S.C. §§ 241 and 247.

10. The commission was jointly established in 2000 by the United States and Mexico, under authority granted in Public Law 103–400, with US representation provided by the Department of Health and Human Services Secretary and members of each of the four US border states.

11. SPP. Report to leaders, June 2005. Available at: http://www.spp.gov/report_to_leaders/index.asp. Accessed June 23, 2006.

12. World Health Organization. International health regulations. Available at: http://www.who.int/csr/ihr/en. Accessed June 22, 2006.

13. Section 107 of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002.

14. MidAmerica Alliance. Homepage. Available at: http://www.midamericaalliance.org. Accessed June 21, 2006.

15. Texas Department of State Health Services. Barriers to binational cooperation in public health between Texas and Mexico. Available at: http://www.dshs.state.tx.us/borderhealth. Accessed June 21, 2006.

16. State of Michigan. Great Lakes border health initiative. Available at: http://www.michigan.gov/borderhealth. Accessed June 21, 2006.

17. US Department of Health and Human Services. Emergency system for advance registration of volunteer health professiona.s Available at: http://www.hrsa.gov/esarvhp/legregissues/default.htm. Accessed June 21, 2006.

18. US Constitution, Article I, section 10, clause 3.

19. Council of State and Territorial Epidemiologists. Guidelines for US-Mexico coordination on epidemiologic events of mutual interest. Available at: http://www.cste.org/PS/2006pdfs/PSFINAL2006/06-ID-03FINAL.pdf. Accessed June 23, 2006.

20. PNEMA was approved in a joint resolution dated November 12, 1998 (Public Law 105–381, 112 Stat. 3402)

21. Seattle Post-Intelligencer. Available at: http://seattlepi.nwsource.com/local/6420AP_WA_Washington_BC.html. Accessed June 21, 2006.

22. Senate Joint Resolution 37 was introduced on May 24, 2006. Available at: http://thomas.loc.gov/cgi-bin/query/z?c109:S.J.RES.37.IS. Accessed June 20, 2006.

23. 42 U.S.C. § 5196(h).

24. Questions may be directed to the Office of the Legal Adviser for Treaty Affairs. Available at: http://www.state.gov/s/l/treaty/faqs/70120.htm. Accessed August 14, 2006.

25. Buenger, ML, Masters, RL, McCabe, MH, Broun, CN. *The Evolving Use and the Changing Role of Interstate Compacts: A Practitioner's Guide.* Chicago, IL: American Bar Association; 2006:47–53.

26. For a general description of the system of government in Canada, see: Forsey, EA. *How Canadians Govern Themselves, Sixth Edition.* Ottawa, Canada: Her Majesty the Queen in Right of Canada; 2005 (Issued also in French under title: *Les Canadiens et leur systeme de* gouvernement). The authors are unaware of any publication similarly describing the system of government in Mexico.